

## LEADING A CULTURE OF FITNESS

BY

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# USAWC STRATEGY RESEARCH PROJECT

## LEADING A CULTURE OF FITNESS

by

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## ABSTRACT

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## LEADING A CULTURE OF FITNESS

Despite considerable efforts, Air Force leaders still grapple with how to bolster fitness levels after only three quarters of the force met standards.<sup>1</sup> Fortunately there has been some improvement following an honest assessment, but significant challenges remain. Fitness directly impacts readiness and indirectly affects budgets. For these two reasons fitness has become a strategic issue. In a time of war and declining resources any non-deployable portion of the team creates a burden on the overall force.<sup>2</sup> Additionally, future defense budgets cannot sustain the current trajectory of health related expenses, and the evidence is clear, a more fit force has lower health care costs.<sup>3</sup> The Air Force must address organizational *culture* in order to meet fitness goals. Through sustained leadership Airmen will develop and foster their own *culture of fitness*. The following analysis hopes to contribute to that effort.

### Definitions

A military's purpose is to win its nation's battles. Victory depends on many things but certainly includes teamwork and team competence across a broad spectrum of tasks. Moreover, because military organizations must operate in unknown environments and conditions, mission preparation cannot be overly specialized. Success also depends on preserving human and material resources. Therefore, fitness for the Air Force must serve these *functions*—to foster teamwork, to prepare Airmen for unknown environments, and to preserve resources.<sup>4</sup>

Towards that end, the USAF must promote norms, values, and beliefs that inspire Airmen, both collectively and individually, to maintain *optimum fitness* for the institution and themselves.<sup>5</sup> To best prepare for unknown environments, *optimum*

*fitness* must develop generalized physical skills across many areas such as cardiovascular endurance, stamina, strength, flexibility, power, coordination, agility, balance, and accuracy.<sup>6</sup> *Optimum fitness* should also preserve resources by focusing on medical wellness measured by parameters such as blood pressure, body fat, bone density, triglycerides, cholesterol, and muscle mass.<sup>7</sup> Additionally, the *culture* would create both a sense of pride and necessity to obtain and maintain optimal health. Finally, the institution would attract and retain people with the same mindset. In other words, the shared beliefs, pride, and desire to be part of an *optimally fit team* define an Air Force *culture of fitness*.

### Strategic Importance

Success on a battlefield traditionally demanded a high level of physical fitness. Today however, some forms of combat are as physically strenuous as sitting on a couch playing video games, and as the battlefield becomes more and more high-tech, physical fitness may come to seem less important. The reality is not quite as clear though, and the benefits of physical fitness still directly affect many critical aspects of a professional fighting force. Numerous studies indicate physical fitness improves cognitive function, the ability to handle stress, injury recovery, adaptability in harsh environments, and produces a higher level of work performance.<sup>8</sup> Additionally, experience indicates today's asymmetric type warfare has only increased the need for leaders to possess a mental and physical readiness, not decreased it.<sup>9</sup>

Not only does physical fitness affect combat readiness, it affects budgets. Unsustainable health costs will have direct strategic effects on today's ongoing wars, and the United States' ability to fight future wars.<sup>10</sup> Analysis of both follows.

## Readiness

General Hap Arnold's prescient thoughts on fitness still ring true today. He stated, "If you are not in top physical condition, they may knock the hell out of you. It's as simple as that."<sup>11</sup> Ninety percent of the Air Force's 328,000 active duty personnel fill deployable positions, and on average about 37,000 Airmen (active, guard, and reserve) deploy annually around the world with as little as twenty-four hours notice.<sup>12</sup> The Air Force deploys to unstable, austere, and rugged regions under high threat conditions requiring heavy, physically demanding armor and chemical gear. In addition to these burdens, long hours and high stress conditions will tax even highly conditioned athletes.<sup>13</sup>

According to a 2005 Government Accountability Office (GAO) report, the Office of the Undersecretary of Defense for Personnel Readiness is lacking in its oversight and questions the services' medical and physical readiness. Specifically, GAO noted how the Undersecretary's "office has not enforced its own requirement for the services to report on the components' physical fitness status." The report calls into question whether the Department of Defense (DoD) can provide the Secretary of Defense or Congress assurances that the force is medically and physically fit.<sup>14</sup> This is not the first time the GAO has called out DoD for failing to meet its fitness readiness requirements. Both in 1994 and 1995 the GAO completed studies following Desert Storm. While these GAO reports focused on the National Guard and Reserve, they also called into question the active force. The 1994 GAO report noted, "Some members could not deploy to the Persian Gulf, and others had difficulty performing their mission while there."<sup>15</sup> Regrettably, they found non-compliance with physical fitness requirements across the board for all services. Additionally, the 1995 report notes, "Officials from all the services

told us that their physical fitness tests were designed to meet DoD's requirements, but had little correlation to the individual's military missions."<sup>16</sup> Clearly physical fitness directly affects combat readiness and all of the services' ability to conduct their missions.

## Budget

Physical fitness has direct implications on health, and therefore affects both short-term and long-term health expenses. The research is irrefutable, "there appears to be a causal relationship between physical activity and improved health."<sup>17</sup> Hundreds of studies have tried to put a cost-to-benefit ratio on the economic impact of a healthy lifestyle, but an exact measure is difficult to pin down. Obtaining correct measures of cost, sustaining scientifically relevant test groups, and standardizing the data all contributed to those difficulties. Kamon and Patton, experts on physical fitness and contributors to the *International Proceedings Consensus Statement of Physical Activity, Fitness and Health*, did a meta-analysis of numerous studies and concluded participants in worksite fitness programs do seem to be at lower risk for ill health, utilize fewer health care services, are absent from work less, and may be more productive.<sup>18</sup>

Unfortunately neither the Air Force nor DoD collects or reports data for expenses directly or indirectly related to unfit personnel. Complicating the matter further, some costs of poor fitness are not realized until later in life if diseases such as diabetes and hypertension develop. But the studies are clear, poor fitness usually leads to poor health, and just as insurance companies use actuarial tables to estimate risk, it is possible to say personnel who fail fitness tests are at higher risk for greater health related expenses.<sup>19</sup> This is not to say highly fit personnel do not also incur health care expenses; they do, but on average medical expenses for the unfit are higher.<sup>20</sup>

Depending on the study, medical expenses ranged from hundreds to thousands of dollars more per year for the unfit.<sup>21</sup> Consequently, if twenty percent of the Air Force's personnel are more likely to generate higher health related expenses (estimated by the fitness test failure rate), at least \$28 million to \$140 million of the Air Force's budget could be saved by getting the force into shape.<sup>22</sup> The same studies also indicated a fiscal cost-to-benefit ratio of workplace health programs between 1:1 and 1:6.<sup>23</sup> In other words, if the USAF focused on wellness instead of treatment, savings could reach \$840 million.

The 2011 National Defense Authorization act appropriated \$726 billion for defense spending and contingency operations in Iraq and Afghanistan.<sup>24</sup> The Pentagon now spends \$59.6 billion of its total budget on health care—more than double what it did ten years ago.<sup>25</sup> TRICARE currently covers 9.4 million beneficiaries. The real savings would come from retirees and their families if they would continue a healthy lifestyle they learned while in the military. If DoD only spent one percent on wellness instead of treatment, it has the potential to save up to \$3.6 billion per year.<sup>26</sup>

Secretary of Defense Robert Gates commented on Defense health care spending and its affects on shrinking budgets, "Leaving aside the sacred obligation we have to America's wounded warriors, health care costs are eating the Defense Department alive." The GAO reported that only six percent of the DoD health care expenses were from overseas contingency operations; wounded warriors are not causing the increase.<sup>27</sup> The strategic importance of the trajectory is clear, it is unsustainable. The Department of Defense will share in the cost burden and will mirror U.S. health care spending over the last thirty years which grew 2.5 percent faster than

the average annual GDP per capita.<sup>28</sup> The drivers of this growth rate are varied but include: increased number of beneficiaries, increased use and expense of medical technologies, and an increase in lifestyle risk factors such as obesity, which can lead to expensive chronic conditions.<sup>29</sup> Creating a *culture of fitness* can set the conditions required to change trajectory. Fortunately, a recent emphasis on fitness has led to some improvement.

### Historical Perspective

For the last six decades the Air Force has been working through at least fourteen different policies on how to conduct, test, and report on physical fitness.<sup>30</sup> Over the years studies have reported numerous program deficiencies, but for various reasons policy changes have focused on test methods. To move forward the Air Force must think differently and instead focus on building a *culture of fitness*, a necessary foundation that will ultimately improve test scores regardless of the type, difficulty or frequency of testing. A review of historical policies provides an important basis from which to move forward.

Fitness became a prime concern for the US Military after WWI when a study concluded that one out of every three draftees was not fit for duty.<sup>31</sup> Following WWII over 900,000 of the 2 million men tested were unqualified.<sup>32</sup> Results from the Korean War were similar and prompted Eisenhower to champion key modern fitness initiatives.<sup>33</sup> Kennedy also followed suit and began the President's Council on Fitness leading Dr. Ken Cooper, an Air Force officer and pioneer in American fitness, to look at exercise as a way to prevent disease. Dr. Cooper's work catalyzed many modern fitness programs, including the USAF's.<sup>34</sup>

From 1947 until 1959 Air Force Regulation 50-5 served as the USAF's fitness guide. The publication was brief and to the point with three objectives: 1) ensure individuals could perform their duties, 2) encourage regular exercise, and 3) foster team spirit. Beyond this, no other specifics were given on how to implement the Air Force's fitness program.

In 1959 Bruno Balke and Ray Ware conducted a comprehensive study and "concluded that the overall state of physical fitness in the Air Force is poor and that the Air Force's physical fitness program as it now stands, is ineffective."<sup>35</sup> Based on that study the Air Force revised 50-5 and directed commanders to establish weight standards and regular exercise programs. Despite these directives, no standards of performance for physical fitness were prescribed. Added in 1961, Air Force Manual 160-26, *Physical Conditioning*, stated the commander must ensure the fitness of the unit.<sup>36</sup>

In 1962 the Air Force adopted an entirely new approach to physical fitness based on the Royal Canadian Air Force Five Basic Exercise (5BX) plan. Air Force Pamphlets 50-5-1 and 50-5-2 spelled out a program of five basic exercises for men and ten exercises for women.<sup>37</sup> This simple program set performance standards and was designed to aid in muscle and cardiovascular development. After excessive failures the Air Force modified the program in 1965.<sup>38</sup>

In 1967, Major Kenneth Cooper, at that time an Air Force flight surgeon, published a paper in the *Journal of the American Medical Association*.<sup>39</sup> His research correlated the body's energy production capacity before exhaustion with the body's ability to consume oxygen (VO<sub>2</sub>max - volume per time, oxygen, maximum).<sup>40</sup> By doing this, he proved the body's ability to consume oxygen was also a direct measure of

physical fitness. This was the genesis of the Air Force's 1.5-mile run. Dr. Cooper presented his fitness plan to the Air Force Chief of Staff who implemented it in 1969 as AFP 50-56.<sup>41</sup> The program required semi-annual testing and established five fitness categories (I-Very Poor, II- Poor, III-Fair, IV-Good, V-Excellent) scored by time and scaled for age. Ironically, this closely mirrors the fitness program in place today.<sup>42</sup>

Over the next twenty-one years, Dr. Cooper's program remained the basis of the Air Force fitness program with only minor changes. Results of the program were mixed, for example in 1973 the Air Force Surgeon General chastised commanders for Airmen reporting to training overweight.<sup>43</sup> By 1977 the program had morphed into Air Force Regulation 35-11, the *USAF Physical Fitness and Weight Control Program*. The regulation still had the 1.5-mile run, but after several Airmen died during testing, a three-mile walk was allowed as an alternative.<sup>44</sup> The program also introduced a new method for calculating maximum allowable weight, and exempted members over the age of 45 from taking the annual test. This ultimately led an Air Force study to conclude the "Air Force does not have a viable program."<sup>45</sup> Despite recommendations for change, the program essentially remained in place until 1992 when cycle ergometry testing replaced the 1.5-mile run.<sup>46</sup>

Once again the Air Force changed its regulations, this time splitting fitness off into Air Force Instruction (AFI) 40-501, *Air Force Physical Fitness Program*, and AFI 40-502, *The Weight and Body Fat Management Program*. As shown earlier,  $\text{VO}_2\text{max}$  is a good indicator of cardio respiratory fitness. A maximum effort test on a treadmill is one of the most accepted and accurate methods to determine  $\text{VO}_2\text{max}$ , but the test is lengthy, complicated, and comes with risks. To avoid these drawbacks, the Air Force



adopted a sub-maximal cycle ergometry test (SCET) designed to estimate  $\text{VO}_2\text{max}$ . These tests were accurate within the range of ten to twenty percent of true  $\text{VO}_2\text{max}$ . In addition to the SCET, height and weight tables estimated body composition and pushups and sit-ups tested muscular endurance as a form of fitness.<sup>47</sup> Almost as soon as the program was implemented there were complaints of inaccurate results.<sup>48</sup> Additionally, as reported by the *Air Force Times*, thirty-one percent of those initially tested did not reach their required fitness levels.<sup>49</sup> Air Force leaders were still seeking a program that motivated the force to exercise three to five times per week. The inability to achieve this led to a resurgence of previous procedures.

In 2004 the Air Force revamped its program and went back to its roots; with it came the standard AFI change, this time it was AFI 10-248, *The Air Force Fitness Program*. Testing once again included a 1.5 mile run, one minute of push-ups, and one minute of sit-ups. In addition, body composition and health risk were estimated with height and weight charts and a waist measurement. This regulation was also supplemented with AFI 34-266, *The Air Force Fitness and Sports Programs* and AFI 40-104 *Nutrition Education*. Additionally, the Air Force decided to enact consequences on Airmen who chronically failed the test. Under the new AFI, those who failed the test were placed in remedial fitness and nutrition training in an effort to bring up their score. After training, those who were unable to pass eventually would receive a “does not meet standards” performance report and could ultimately be separated from the Air Force. Despite a low reported failure rate, independent and surprise audits of the system suggested standards were not being maintained.<sup>50</sup> In addition, many complained

because the waist measurement accounted for twenty percent of the test score but was not adjusted for height.

Complaints and the apparent lack of integrity in the testing system brought about the most current program implemented July 1, 2010, AFI 36-2905, *Fitness Program*. The categories of testing remain the same but now failure in any one area results in failure overall. In addition, waist measurements are relaxed slightly, and point levels are more incremental for the strength and run portions of the test. Other major changes included a move to semi-annual testing to encourage regular fitness, and finally the creation of an independent Fitness Assessment Cell (FAC).<sup>51</sup>

Unfortunately data revealed both positive and negative effects of the new fitness policies. Failure rates ballooned from four percent to twenty-three percent after FACs took over testing.<sup>52</sup> Clearly a failure rate of nearly a quarter of the force seems to indicate a *culture of fitness* has not yet been embraced, but just as troubling is the sudden rise in failure rate. This could be accounted for in three ways: a more current and stricter standard being enforced, a previous lack of test administrator training, or an outright lack of integrity. Regardless of the reason, all three aspects reflect negatively on the service's *fitness culture*.

Recent changes in the Air Force fitness policies are a move in the right direction, but it is important to understand testing merely reflects a current status and should not serve as the "end state" in a *culture of fitness*. The root of the issue is how to motivate nearly three quarters of a million people (active, guard, reserve and civilian) to exercise on a regular basis for their own benefit and that of the service.<sup>53</sup> Air Force *culture* lies at the heart of the problem and can be influenced with leadership aimed at encouraging

fitness, not only as individuals, but entire groups. Healthy behavior can be taught, encouraged, and rewarded.

### Culture

If you want to affect change in an organization it is impossible to start without at least considering culture. Louis Gerstner, Jr., former CEO of IBM, describes the importance of organizational culture, “I came to see, in my time at IBM, that culture isn’t just one aspect of the game—it *is* the game.”<sup>54</sup> The United States Air Force has worked to create a *culture of fitness* since its beginning as the Army Air Corps, yet despite positive signs from recent changes, symptoms of business as usual continue to exist. Organizational culture plays a large role in creating an inertia that can either hamper change, or in the long run reinforce behavior. John Kotter, professor at the Harvard Business School, states, “change sticks only when it becomes ‘the way we do things around here.’”<sup>55</sup> In other words it must be part of our norms, values, and assumptions.

Organizational culture is similar to a personality. Personalities form from past histories and shared experiences, and personalities cause us to think differently, value certain things over others, and to form biases and expectations. Organizations are no different. Dr. Steve Gerras, an organizational psychologist and professor of behavioral sciences at the United States Army War College, posits these values and assumptions are learned by organizations to adapt and deal with problems, both internally and externally.<sup>56</sup>

Edgar Schein argues organizational cultures are composed of three levels: artifacts, values, and assumptions.<sup>57</sup> Although an organization’s values and assumptions are not directly observable, Schein believes it is possible to analyze them by looking at an organization’s observable artifacts. This approach is intuitive, and has

been used before to analyze military cultures. Schein also emphasizes how embedding and reinforcing mechanisms influence an organization's culture. Leaders and organizations use embedding mechanisms to measure performance, reward behavior, allocate resources, model systems, and to communicate ideas. Likewise, organizations use reinforcing mechanisms to set up procedures, perform rituals, tell stories, or to enforce formal policy. Organizational cultural is a powerful influence on behavior.

Robert House and a team of researchers improved on the ideas of Geert Hofstede, an organizational culture expert and Emeritus Professor, at Maastricht University, in a project called the Global Leadership and Organization Behavior Effectiveness program (GLOBE). The study identified nine attributes of organizational culture, referred to as dimensions, which facilitate and enable cultural comparisons and analysis. Dr. Gerras merges Schein's model with five dimensions of the GLOBE project and ties in some of Schein's embedding and reinforcing mechanisms to suggest ways to improve Army culture. Gerras' hybrid approach is also useful to analyze the USAF's *fitness culture* by focusing on four relevant GLOBE dimensions: High Performance Orientation, In-Group Collectivism, Institutional Collectivism, and Future Orientation.<sup>58</sup>

### Cultural Dimension Analysis

#### Performance Orientation

The performance dimension relates to how organizations reward and view accomplishment, and is instinctively important when analyzing an activity like fitness. To some degree, the military already enjoys a cultural affinity for high achievement. Peak performance is reflected in many of the services' mottos, all highly visible artifacts; "Army Strong," "The Few, The Proud," "Aim High—Fly, Fight, Win!" These powerful mottos are positive and act as embedding mechanisms for building a *culture of fitness*.

Indeed, the Air Force's fitness mantra, "Fit to Fight," is an artifact that reflects the norm of the service—you must be fit, in order to "Fly, Fight, and Win!"

Reward for performance is a key and visible embedding mechanism. Brigadier General Neubauer successfully implemented a culture of fitness at Luke Air Force Base by regularly exercising with his Airmen, but more importantly, he hung a fitness leader board for all to see. Neubauer's name regularly appeared on the chart, and for those who topped him, praise quickly followed. When asked how he communicated fitness as a priority General Neubauer replied, "Deeds, not words."<sup>59</sup>

Under the current program, performance evaluations merely reflect fitness test results as either "meets" or "does not meet" standards. Receiving a high fitness score receives no distinction from poor performance as long as performance is passing. In other words, the only incentive associated with fitness reporting is negative. When it comes to producing behavioral change numerous studies indicate positive incentive produces far better results than negative incentive.<sup>60</sup>

The United States Marine Corps clearly evaluates and reports on fitness, and scores directly impact Marine's promotions, but is this the only aspect that motivates Marine fitness? Unlikely, but it certainly goes a long way towards improving the standard. The jury is still out on the effectiveness of material or financial incentives towards motivating behavior. A RAND report seems to indicate participation in health intervention programs increased with financial incentives, however, the effectiveness of the programs were mixed.<sup>61</sup>

## Group Collectivism

Given the success of the Marine Corps' *culture of fitness*, and the mixed results of financial incentives, other aspects must be contributing to the Marine's fitness. Group Collectivism reflects how members express pride in their organization, and is a significant factor in culture. Lieutenant General Amos, Deputy Commandant for Marine Corps Combat Development states:

The United States Marine Corps has for many years taken pride in the level of physical fitness of its members. Physical fitness has been associated with professional performance, especially performance in combat. This association is correct because combat is the factor that should matter most to a fighting organization.<sup>62</sup>

Recent Marine commercials depict recruits maneuvering through obstacle courses and fighting in pugil stick arenas. The USMC homepage declares, "For many recruits, pugil stick training is the most intense physical combat they have ever experienced ... it is a crucial step in their transformation from civilian to warrior."<sup>63</sup> Does the United States Air Force show the same kind of Group Collectivism as other physically fit organizations? Looking at other artifacts will inform the examination.

Air Force recruits also complete an obstacle course and pugil stick training, but USAF commercials highlight technical skills rather than physical combatives. For example, two of the latest Air Force commercials show a space systems operator manipulating satellite orbits to avoid space debris and computer specialists negating a cyber attack. The Air Force takes pride in its technical skills; the Marines take pride in their physical prowess. Both skills are critical to each service, but the comparison highlights what aptitudes and abilities the services are trying to recruit, and therefore at least in some manner value. Each approach plants a strong embedding mechanism before members even join their respective organizations. The Air Force rightly

embraces its technical culture, but if physical fitness is also valued the Air Force must demonstrate and recruit those skills.

Recruiting is no trivial matter and competition for physically fit candidates will only become more intense. The United States Army Forces Command (FORSCOM) stated only twenty-five percent of graduating high school seniors are eligible to enter the military because the remaining majority are either obese, taking drugs, or criminals.<sup>64</sup> The Center for Disease Control and Prevention reports the obesity rate for 17 – 24 year olds has increased to twenty-three percent. The Air Force has many exciting opportunities that appeal to “in shape” and “technically savvy” potential recruits; it is important to reach out and capture that talent. Once recruited though, the real effort begins regardless of the physical shape candidates are in when they enter the service.

### Institutional Collectivism

Institutional Collectivism is the degree to which organizations reward collective action. The commander’s intent in AFI 36-2905 *Fitness Program*, states, “It is every Airman’s responsibility to maintain the standards set forth in this AFI 365 days a year.” Although true, the directive focuses on the individual rather than an entire unit. Further, under the unit commander’s responsibilities, the directive centers on administrative functions such as documenting or taking negative actions on Airmen who fail to meet standards. Rather the AFI should concentrate on how to motivate commanders to ensure the fitness of the squadron as a whole. Imagine the interest commanders might take if their ratings depended on collective fitness levels of those they lead.

One positive change as a result of the new fitness regulation is the reporting of individual test results by Wings to their Major Commands (MAJCOMs). However,

regulations do not require or measure group fitness programs, and there are no comparisons or reporting among squadrons.<sup>65</sup> In fact, individual physical fitness test (PFT) scores are closely guarded and controlled as private. How the USAF fights is a possible reason for this cultural difference. Combatants in the USAF are generally limited to small groups and in some cases even individuals. For example, fighter pilots operate in single seat cockpits, other aircrew function in units from two to six. Maintenance units, although massive organizations, are broken down into small, specialized functions to perform their mission. It is possible to find units that conduct large group physical training sessions, but this is the exception and not the rule. The organizations that conduct group PT sessions more closely mirror their brothers and sisters in the Army and Marines, for example, Security Forces, Combat Controller, and Civil Engineering squadrons. Unit pride based on physical fitness is rarely recognized, competed, or rewarded because group fitness is so infrequent and not measured. Once again, this observation should not be considered as criticism, it is just one dimension the USAF must overcome to institute a *culture of fitness*.

Just like aircraft utilization rates, operational readiness rates, and weapons effectiveness, units should measure, evaluate and reward group fitness. Squadrons go to great lengths to win competitions with rival units. Bragging rights alone would increase the level of participation in unit fitness. Current emphasis is on individual fitness rather than team performance and runs counter to building an institutional *culture of fitness*. Commanders who produce high performing teams when it comes to many other measures of job performance are rewarded, so why should unit fitness not be included as part of those measures?



Communicating the importance of fitness for the entire force is also important. Certainly the mantra, “Fit to Fight” applies to combatants, but some might question whether this applies to the entire Air Force. What about the Airman who works in a cubical and will never see a combat zone for their entire career? One could argue an Airman is subject to combat at anytime, but this is simply not true for many Airmen, and is a large cultural difference between the Air Force and Marines. The emphasis instead should be how physical fitness supports not only the individual, but also the overall health, and therefore readiness and budget of the Air Force.

John Kotter in his book *Leading Change* lists communication failure as one of the top reasons most organizations are unable to create meaningful change.<sup>66</sup> A RAND study published in 2010 analyzed cultural theme messages from senior Air Force leaders from 2005-2008. Specifically they analyzed all of the communication from the Secretary of the Air Force, the Chief of Staff of the Air Force, and the Chief Master Sergeant of the Air Force—a total of seventy messages sent to the Air Force as a whole. The report noted that communications were at times sporadic and inconsistent, but overall the messages were congruent and did not contradict each other. The leaders clearly presented themes such as taking care of Airmen, a common identity, and core values. RAND found the leaders actively addressed the goal of Individual Well-being and Readiness in twenty-three of the seventy messages, but fitness was only a portion of that stated goal.<sup>67</sup> The report concluded senior leaders must never underestimate their ability to create, embed and transmit a culture that will bring about desired change. Institutional Collectivism contributes to Air Force culture, but communicating how institutional benefits affect all Airmen is just as important.

## Future Orientation

The Future Orientation dimension is similar to a savings program set up to take advantage of future compound interest. In other words, how well does an organization reward future-oriented programs and behavior?

The “not enough time to exercise” problem is not unique to Air Force culture; Americans cite that excuse more often than any other.<sup>68</sup> A survey conducted in 2000 indicated only ten percent of USAF members participated in physical fitness programs as compared to eighty-five percent of the Marine’s surveyed, seventy-nine percent of the Army, and sixty-two percent of the Navy.<sup>69</sup> The reluctance of leaders to mandate duty hours towards fitness is understandable. By requiring commanders to allocate duty hours towards fitness spends one of their limited and most precious resources—time. But if the Air Force is serious about creating a *culture of fitness* it must commit its resources to that priority. Doing so sends a definitive message about the precedence of fitness, and reinforces one of the other main concerns of Air Force leaders, taking care of Airmen. Additionally, studies indicate workplace fitness programs lead to increased performance and productivity.<sup>70</sup>

Maintaining the health of Airmen is the physiological equivalent of maintaining airplanes and equipment. Both are important, and both require time. In regards to future orientation, the USAF should have a cultural advantage based on its out of the box thinking and high innovation, but putting words into action is significantly more difficult.<sup>71</sup> Unfortunately operational tempo and demands from bosses will always compete with time to exercise. The dilemmas—fix the airplanes, write the performance report, plan the mission, or take an hour during the day to go workout? This is a false dilemma because there are numerous other solutions; for example, think of the wasted time

spent on unnecessary email and repeat online training. The Air Force must focus on the long-term benefits of allocating duty time for fitness by recognizing fitness as a “critical” program. The few hours per week paid toward fitness will certainly save future health dollars and lost workdays. The Air Force has some cultural hurdles to overcome, and some difficult policy choices to make, but doing so can create the momentum necessary for building a *culture of fitness*.

### Policy recommendations

After six decades, no matter what the test, testing for fitness does not create a *culture of fitness*. Clearly, in order to change an organization you must change the culture. By using key embedding and reinforcing mechanisms change is possible. Recommendations focus on three areas each relating to a cultural dimension analyzed earlier: 1) reward, 2) recruiting, and 3) resources.

#### Reward

**Reward high performing individuals, units, and commanders.** Fitness is a performance based measure and is arguably one of the only true objective standards common to all Air Force specialties. It is undeniable; rewarding high performance encourages high performance. If the Air Force truly values fitness, then it must reward it.

Place actual fitness test scores on performance reports. A raw or percentile score enables a promotion system to account for high fitness achievement. The USMC already uses this system so it is feasible, and a phased approach could lower the risk of any unintended consequences. Finally, begin gathering, reporting, and disseminating collective squadron fitness levels. The Air Force fitness database already contains this

data making implementation fairly straightforward and practicable. Maintain privacy by reporting the score as a unit average.

## Recruit and Train

**Recruit physically fit personnel, then train for life.** Continue to demand a minimum fitness level to graduate from basic courses, but monitor future fitness levels and reward for continual improvement. Focus on holistic fitness training programs at beginning, intermediate and senior courses.

Physical fitness is already a daily routine at both officer and enlisted basic training courses, and physical training sessions are essential to molding new recruits, but these sessions do not build a lifestyle of fitness. It is just as important to educate recruits, both officer and enlisted, on healthy lifestyle choices and routines. Both the Air Force and Army have made great strides in this area but the Army's Soldier Athlete initiative being implemented at U.S. Army Training and Doctrine Command (TRADOC) by Lt. Gen. Mark Hertling hits the mark for creating a *culture of fitness*.<sup>72</sup> The Army is implementing a three-tier approach at basic training and intermediate schools and includes combat training regimes, athletic trainers in all initial military training units, and a nutritional fueling program. In addition, through the Army Physical Fitness Research Institute (APFRI), the Army has also implemented complete fitness lifestyle programs at senior officer and non-commissioned officer professional military education (PME) schools. The Air Force should not try to reinvent the wheel; rather, it should strive to copy these programs which focus on leaders who can then foster and spread the *fitness ethos*. Finally, implementation at the squadron level is what will make this successful.

Each squadron needs a professionally trained fitness and nutrition expert to schedule and ensure variety in the squadron's fitness routines.

The Army has implemented a similar program so the task is feasible but moderately difficult. Additionally, setting up a program similar to APFRI is expensive and therefore carries moderate risk in a financially constrained environment, but the benefits are overwhelming and worth the effort.

## Resources

**Require fitness during the duty day.** AFI 36-2905 *Fitness Program*, states commanders *should* establish an environment to maintain fitness. Yet neither DoD nor Air Force policies currently mandate workday fitness programs.<sup>73</sup> Change the regulation to require duty day fitness at least three days a week, a powerful message by itself. But leadership through “Deeds, and not words” will prove the most successful; leaders out exercising with their Airmen during the duty day will go much farther than almost anything else the Air Force could do to create a *culture of fitness*.<sup>74</sup> Implementation will experience heavy resistance but is feasible. The effort carries no more risk than mandating duty day equipment maintenance, and in-fact not taking action carries significant risk. It all comes down to leadership.

## Conclusions

The Air Force must pursue fitness with the same rigor it maintains aircraft, and doing so will preserve its most valuable asset—Airmen. Organizational *culture* is the root cause of Air Force fitness problems, not test methodology. Organizational change is difficult because it requires changing *culture*. This paper focused on four dimensions of Air Force culture: Performance Orientation, Group Collectivism, Institutional Collectivism, and Future Orientation. The Air Force has embarked on a number of

initiatives towards building a *culture of fitness* and it is probably closer than it has ever been to achieving its goal. To create a *culture of fitness* requires rewarding performance, recruiting and training Airmen throughout their career, and then committing resources to the change. Finally, senior leaders must frequently and consistently talk about why fitness is important to all members of the force, not just combatants. Specifically, they should address the overall benefits of a healthy lifestyle, the professional image and standards required of Airmen, readiness requirements and finally budget ramifications. With strong leadership from all levels the Air Force will build a *culture of fitness* and truly be—Fit to Fight!

## Endnotes

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<sup>2</sup> Current Air Force policy requires all members who deploy to have a *current* fitness assessment score, however, not all deployment positions require a *passing* fitness score to deploy. Any position that requires Combat Skills Training, on the other hand, *does* require a passing score in order to deploy. Medical and commander assessments are the only means to ensure Airmen are not shaving points in order to avoid a deployment based on fitness.

<sup>3</sup> David M. Walker, “DoD’s 21<sup>st</sup> Century Health Care Spending Challenges,” briefing slides for the presentation for the Task Force on the Future of Military Health Care, April 18, 2007. <http://www.gao.gov/cghome.htm> (accessed February 14, 2011); Claude Bouchard, Roy J. Shepard, and Thomas Stephens, eds., *Physical Activity, Fitness, and Health, International Proceedings and Consensus Statement* (Champaign, IL: Human Kinetics Publishers, 1994), 134.

<sup>4</sup> “What is Fitness?” *The CrossFit Journal* (October 2002) <http://www.crossfit.com> (accessed 11 February, 2011). An excellent article beyond the scope of this paper. Although our definition was derived from Crossfit, it is our position that Crossfit is not, and should not be, the only method to reach our definition of fitness. In fact, it is the author’s opinion that whatever physical activity individuals enjoy, will do regularly, improves fitness, and contributes to the culture of fitness, hits the mark squarely for where we are aiming. To demand otherwise does not recognize individual talents, nor does it contribute to the overall *culture of fitness*.

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<sup>6</sup> “What is Fitness?” *The CrossFit Journal* (October 2002) <http://www.crossfit.com> (accessed 11 February, 2011).

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<sup>8</sup> Bernd Horn, Colonel, and Dr. Robert W. Walker, eds., *The Military Leadership Handbook* (Ontario, Canada: Canadian Defence Academy Press, 2008), 430, 482, 489; U.S. Department of the Army, *U.S. Army Fitness Training Handbook* (Guilford, CT: Lyons Press, 2003), 01.

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<sup>10</sup> David M. Walker, “DoD’s 21<sup>st</sup> Century Health Care Spending Challenges,” briefing slides for the presentation for the Task Force on the Future of Military Health Care, April 18, 2007. <http://www.gao.gov/cghome.htm> (accessed February 14, 2011).

<sup>11</sup> United States Army, *Army Air Force manual 50-35-1, Fitness Handbook* (Washington, D.C., 1945), 2.

<sup>12</sup> Bruce Rolfsen, “More 6-month tours for airmen, War push, past drawdown combine to lengthen deployments,” *Air Force Times*, July 24, 2009. [http://www.airforcetimes.com/news/2009/07/airforce\\_deployments\\_072409w/](http://www.airforcetimes.com/news/2009/07/airforce_deployments_072409w/) (accessed March 16, 2011).

<sup>13</sup> Gordon R. Strong, Lieutenant Colonel, USAF, “The Fitness Factor,” *Air and Space Power Journal – Chronicles Online Journal* <http://www.airpower.au.af.mil/airchronicles/cc/strong.html> (accessed October 11, 2010).

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<sup>15</sup> U.S. Government Accountability Office, *Reserve Forces DoD Policies Do Not Ensure That Personnel Meet Medical and Physical Fitness Standards* (Washington, D.C.: U.S. Government Accountability Office, March 1994), 2; U.S. Government Accountability Office, *Army National Guard Combat Brigades Ability to be Ready for War in 90 Days is Uncertain* (Washington, D.C.: U.S. Government Accountability Office, June 1995), 4.

<sup>16</sup> U.S. Government Accountability Office, *Army National Guard Combat Brigades Ability to be Ready for War in 90 Days is Uncertain* (Washington, D.C.: U.S. Government Accountability Office, June 1995), 4.

<sup>17</sup> Claude Bouchard, Roy J. Shepard, and Thomas Stephens, eds., *Physical Activity, Fitness, and Health, International Proceedings and Consensus Statement* (Champaign, IL: Human Kinetics Publishers, 1994), 134.

<sup>18</sup> Ibid.

<sup>19</sup> Dr. Neal Baumgartner, interviewed by the author 8 December 2010.

<sup>20</sup> Claude Bouchard, Roy J. Shepard, and Thomas Stephens, eds., *Physical Activity, Fitness, and Health, International Proceedings and Consensus Statement* (Champaign, IL: Human Kinetics Publishers, 1994), 134.

<sup>21</sup> Ibid., 137.

<sup>22</sup> Secretary of the Air Force, *United States Air Force FY2011 Budget Overview* (Washington DC: Financial Management Budget Office, February 2010), 15. <http://www.saffm.hq.af.mil/budget/> (accessed February 14, 2011); The savings range was calculated by using the twenty percent failure rate on the fitness test (this is probably conservative since civilian personnel don't take fitness tests but would fail at an equal rate or greater than the military personnel), then multiplying the increased spending on treatment due to poor health (\$200 to \$1000 per person per year), by the cost benefit ratio range of 1:1 and 1:6. Or  $(702,667 \text{ personnel} \times .20) = 140,553 \text{ personnel}$ .  $140,553 \text{ personnel} \times \$200 \text{ in treatment costs} = \$28 \text{ million}$  ranging to  $140,553 \text{ personnel} \times \$1000 \text{ in treatment costs} = \$140 \text{ million}$ . If the cost benefit ratio ranges from 1:1 to 1:6 then wellness savings range from  $1:1 \times \$28 \text{ million}$  to  $1:6 \times \$140 \text{ million} = \$840 \text{ million}$ .

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<sup>35</sup> Balke, Bruno, and Ray W. Ware, Captain, USAF, *The Present Status of Physical Fitness in the Air Force*, Research report No. 59-67 (Randolph, AFB, TX: School of Aviation Medicine, May 1959), 1.

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<sup>38</sup> *Ibid.*

<sup>39</sup> Steven J. Swiderski, *Fit to Fight: Waist vs Waist/Height Measurements to Determine an Individuals Fitness Level—A Study in Statistical Regression* (Wright Patterson AFB OH: AFIT, 2005), 13.

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